

CHRISTOPHER I. BECKWITH



GREEK BUDDHA

PYRRHO'S ENCOUNTER WITH EARLY BUDDHISM
IN CENTRAL ASIA

CHAPTER 4

Greek Enlightenment

WHAT THE BUDDHA, PYRRHO,
AND HUME ARGUE AGAINST

The argument known in Antiquity as the Problem of the Criterion was introduced to Western thought by Pyrrho of Elis, who learned it in Central Asia and India from Early Buddhism, as shown in the Prologue and Chapter One. The problem revolutionized ancient European thought, such that from Pyrrho's time onward ancient Graeco-Roman philosophy was focused on the epistemological question, "Can we *really* know anything?" The problem remained unsolved throughout Antiquity, but with the ascendancy of Christianity and its Aristotelian and Neoplatonic apologetics, it was sidelined and practically forgotten during the Middle Ages.

When Pyrrhonism was reintroduced to Western Europe in the late Renaissance, the problem once again revolutionized Western thought and shifted the central focus of philosophy to epistemology. The Scottish philosopher David Hume (1711–1776) is responsible for what may be called the problem's modern incarnation, known today as the "Problem of Induction",¹ which he presents in his book, *An Enquiry*

¹ Hume himself does not use the expression "Problem of Induction", and when he does use the word *induction*, it does not have its modern meaning. I use the expression as it is now generally understood and used in a considerable—and highly problematic—literature of its own.

Concerning Human Understanding (henceforth *Enquiry*).^{2xi} “Hume’s Problem” has been perhaps the most important single issue in Western philosophy in the two and a half centuries since his day. All of the major Western philosophers since Hume have grappled with it. Today it is generally considered “unsolvable”. However, this does not mean that it really is “unsolvable”—the idea is singularly inappropriate for it—especially in view of the fact that philosophers seem not to have appreciated the overwhelmingly important role of Pyrrhonism, which Hume actually trumpets throughout his book,³ not to speak of the crucial covert arguments that are presented in it. This chapter is devoted to analyzing these issues, which are fundamental to understanding not only Hume but also Pyrrho, and in turn the Buddha.

As shown in Chapter One, Pyrrho and the Buddha before him taught that things do not have their own absolute, inherent self-identities, or ‘differentiae’. Therefore, our minds provide them. They are often marked in speech by quality words, category words, and many others.⁴

² The work was first published in 1748. The title given here is that printed in vol. 2 of the “new edition” published by Hume in 1772, the last of many that he himself saw through the press. Hume also revised it in 1776, but did not live to see it published in 1777 (Norton and Taylor 2009: 534). Hume wrote many other books, including an earlier, much longer, more involved version of this work, the *Treatise of Human Nature* (1739–1740), which has attracted most of the attention given by modern scholars to Hume’s philosophical work, and is now generally considered to be his greatest contribution to philosophy. I understand other scholars’ wish to study Hume’s early work, but I also respect Hume’s plea (q.v. Endnote xi) to take the *Enquiry* as the final, mature version of his work, and base my discussion almost exclusively on it. I quote it from the 1772 edition, retaining his spelling and punctuation.

³ For example, the article on Hume in the *Stanford Encyclopedia of Philosophy* does not even mention Pyrrho or Pyrrhonism (Morris and Brown 2014). It is now accepted that Hume acquired most of his knowledge about Pyrrhonism from the *Historical and Critical Dictionary* of Pierre Bayle (1740), not from Sextus Empiricus or other primary sources. This accounts for his mixing of Pyrrhonism with Academic Scepticism at some points. Nevertheless, despite the influence of Bayle, Hume clearly understood the significance of the basic points raised by the Pyrrhonists, and overcame his sources. He contributed much to the spread of Neo-Pyrrhonism and influenced many of the philosophers and scientists who followed him.

⁴ The Problems of Induction, the Criterion, and the Differentia are very closely related to each other and to the Problem of Universals, which concerns the existence or nonexistence of superordinate categories. Each problem has its own history and literature, and I am not an expert on any of them. In this chapter I attempt only to focus on the issues relevant to their Enlightenment reflex, Hume’s “Problem of Induction”.

For example, a child looks out the window and sees an animal. What is it? Because things do not have their own inherent differentiae, the animal does not have a little sign or label growing in its fur that spells out its genus, species, and so on, for our benefit. Accordingly, she applies her stored knowledge about things and matches the animal up: it's a "bunny". So far, so good. But did she get this category, BUNNY, and all the things she knows about bunnies, from logic, from pure deductive thinking? No, she got it from induction—from observing bunnies, or from seeing pictures of them and being told about them. Because our knowledge *about* the world comes *from* the world, it is perfectly circular. "Since induction is a contingent method—even good inductions may lead from truths to falsehoods—there can be no deductive justification for induction. Any inductive justification of induction would, on the other hand, be circular."⁵ This is the Problem of Induction.

The problem is connected to the ancient Problem of the Criterion introduced by Pyrrho. In order to have absolutely correct true knowledge about anything, it is necessary to have a criterion that distinguishes perfectly between true and false ideas. In order to know if the chosen criterion is correct, we need to use another criterion. But it too has the same problem: it demands yet another criterion. And so on, *ad infinitum*. It is therefore impossible to have a criterion of truth.⁶ We have to differentiate the category of bunnies from the category of birds, anger from happiness, and many other things, in order to be able to think or talk about them at all. Although dogmatic philosophers may claim that they have reached a conclusion about something *logically* on the basis of *a*, *b*, and *c*, we must agree with Pyrrho: because matters *a*, *b*, and *c* are not themselves inherently differentiated—they do not have their own differentiae or other criteria—the philosophers have supplied them, thus determining everything themselves, consciously or unconsciously, before even starting, making nice, neat, circular arguments. The problem is worse than it seems, because, as the Buddha and Pyrrho say, everything is also unfixed (variable, impermanent, undecided, etc.) and unstable (unbalanced, uncomfortable, etc.).

⁵ Vickers (2010), specifically discussing Hume's version of the problem.

⁶ Cf. Appendix A.

The views on epistemology held by the leading Western philosophers from the early Enlightenment on are nearly all based ultimately on acceptance or rejection of the fundamental position of ancient Pyrrhonism, as understood or misunderstood by them.⁷ Sceptical thought became widely known in Europe following the Latin translation and publication in Paris in 1562 of the surviving works of Sextus Empiricus, a Late Pyrrhonist who argues against the rationalists, who contend that truth is obtained by reason (deduction), and equally against the empiricists, who argue that truth is obtained by the senses (induction).⁸ Sextus argues that some of our perceptions, such as hallucinations, are accepted to be creations of our minds, and thus faulty, while different people often perceive the world differently, so our knowledge of the world as a whole is uncertain. He argues that neither deduction nor induction is reliable. According to Diogenes Laertius, Pyrrhonism's founder, Pyrrho of Elis, said that one must "suspend judgement"⁹ with respect to philosophical arguments about anything beyond the raw perceptions of our senses. The technical expression "to suspend judgement" is now agreed to have developed after Pyrrho, but Timon's gloss on Pyrrho's use of the expression "no more" explicitly says it means "determining nothing, and withholding assent",¹⁰ which in practice would amount to more or less the same thing. In any case, the underlying philosophical approach is an intrinsic part of Pyrrho's known position.

The dogmatic "Academic Sceptics" took the position that all knowledge is uncertain, therefore *nothing* can really be known and *everything* must be doubted. Although they are severely criticized by the Pyrrhonists, from Pyrrho and Timon through Sextus Empiricus, their view was revived in the Renaissance along with Pyrrhonism, and perhaps because the Pyrrhonist position—or rather, nonposition—is subtle and difficult to grasp directly, Academic Scepticism has been

⁷ Cf. Searle (1995: 149–150, 157–158, 168ff.). Searle presents innovative, convincing arguments against the "anti-realist" position. Although he never refers to the issue discussed here as "the Problem of Induction", he does mention that it stems from Enlightenment philosophers (Searle 1995: 154).

⁸ Bury (1933: xxxiii *et seq.*).

⁹ See Chapter One and Appendix A.

¹⁰ Bett (2000: 31).

the unsceptical, absolutist position of most European scepticism ever since.¹¹ Nevertheless, the ancient Pyrrhonist arguments about the imperfection and uncertainty of human knowledge had a revolutionary influence on the Enlightenment philosopher-scientists, most especially on the Scottish philosopher David Hume.

Hume was strongly influenced by Late Pyrrhonism, including the ideas of Sextus Empiricus.¹² In his *Enquiry*, Hume restates Pyrrho's view, as modified by the Late Pyrrhonists,¹³ and tells us repeatedly in the book that he considers himself to be a "Pyrrhonian". Hume applies his formulation of one of the Pyrrhonists' most important theoretical points—that there is no philosophically valid justification for believing in the truth of knowledge acquired by induction—expressly to the results of experimental science. He concludes that we have no *logical* justification for believing in any knowledge acquired directly by induction or in inferences drawn from inductive knowledge. In fact, we not only cannot attain absolute truth about the world, we cannot even show by proper philosophical demonstration that the "real world" exists. Therefore, science, which may be roughly defined as the systematic search for correct knowledge about the world, is basically flawed and unreliable. Hume says,

As to those *impressions*, which arise from the *senses*, their ultimate cause is, in my opinion, perfectly inexplicable by human reason, and 'twill always be impossible to decide with certainty, whether they arise immediately from the object, or are produc'd by the creative power of the mind, or are deriv'd from the author of our being.¹⁴

¹¹ It also affected the position of Pierre Bayle (1647–1706), whose famous *Dictionnaire historique et critique* (1740) includes an article on Pyrrho and one on Pyrrhonism. Bayle's *Dictionnaire* is now believed to have provided most of Hume's knowledge of ancient Pyrrhonism (q.v. the following note). For a recent account of Bayle, see Lennon and Hickson (2013).

¹² On the sources of Hume's knowledge of Pyrrhonism, see Popkin (1951); see also the previous note and Note 3 in this chapter.

¹³ And of course modified again by post-Renaissance Europeans; I will not remark further on this. Cf. the following note.

¹⁴ Hume, *A Treatise of Human Nature* (1739–1740), quoted in Norton (2009: 10). Hume adds to this an instrumentalist "sceptical solution": "Nor is such a question any way material to our present purpose. We may draw inferences from the coherence of our perceptions, whether they be true or false; whether they represent nature justly, or be

The thought of Hume is well known, so none of this is really new to anyone familiar with it. But surely we must ask *why* Hume has made this and other difficult pronouncements, and why Pyrrho and Buddha have done the same before him. Who or what are they arguing against? If we can understand Hume's modern version, we will understand Pyrrho's better, too, and in turn Buddha's. So let us take a closer look.

Hume contends that we live in the world almost completely on the basis of instinct, emotion, and very elementary analysis of the things we experience, in particular an inherent belief in *causation*.

We have said, that all arguments concerning existence are founded on the relation of cause and effect;¹⁵ that our knowledge of that relation is derived entirely from experience; and that all our experimental conclusions proceed upon the supposition, that the future will be conformable to the past. To endeavour, therefore, the proof of this last supposition by probable arguments, or arguments regarding existence, must be evidently going in a circle, and taking that for granted, which is the very point in question.¹⁶

No amount of testing or observation or experiment can prove or disprove this innate belief or feeling, the Principle of the Conformity of Nature.¹⁷ Hume says, "It is only experience, which teaches us the nature and bounds of cause and effect, and enables us to infer the existence of one object from that of another."¹⁸ So we cannot believe in science, which he says depends on experiments that try to predict

mere illusions of the senses." Hume eventually modified his view further to eliminate the doctrinaire assertion of uncertainty.

¹⁵ This is identical in sense to many statements of the Buddha in canonical texts.

¹⁶ Hume, *Enquiry* (1772: 47). His analysis is strikingly close to that of the late Normative Buddhist *pratityasamutpāda* "chain of causation; dependent origination", the basic point of which apparently goes back to the Buddha, but in any case is attested in the late fourth century BC; see the discussion of Megasthenes' reference to the Śramaṇas' expertise in "the causes of things" in Chapter Two.

¹⁷ Or "Principle of the Uniformity of Nature". We thus have no philosophical justification (according to traditional logic) for believing in scientific predictions because they depend on inductive reasoning and are unavoidably circular from beginning to end. It should perhaps be noted that Hume probably did not think science would be in any danger of disappearing because of his arguments, which he no doubt thought would be violently opposed and soon forgotten. They were certainly opposed, but have not been forgotten.

¹⁸ Hume, *Enquiry* (1772: 182).

the future. We do not know everything that could happen, and cannot predict the future:¹⁹ “The falling of a pebble may, for aught we know, extinguish the sun.”²⁰ Therefore, we do not have any truly reliable knowledge about the world.

With Hume’s argument, as with many arguments, the real problem is their many assumptions and premises that are not openly stated or simply unrecognized. The full scope of Hume’s argument becomes visible only if we look at the converse of his main assumptions and arguments—as Hume himself suggests we should do.²¹

First let us take one’s own imperfect self, and the irregularity and imperfection of one’s knowledge, and consider the converse. What do we get? A *perfect* being whose knowledge is *perfect* and does know everything about the world, including about us, and therefore does know everything that can possibly happen. So, unlike us, this being *can* predict the future. The converse of Hume’s sceptical argument is belief in a perfect being who is omniscient, omnipotent, uncaused, and so on.

Paul Russell remarks, “it is surprising to find that in the *Treatise* Hume barely mentions our idea of God, much less provides any detailed account of the nature and origin of this idea.”²² It would be a mistake, however, to conclude from this that theological problems, as they concern our idea of God, are far from his mind. On the contrary, neglecting this topic, in face of the ongoing debate and its obvious

¹⁹ This particular argument is flawed because of unstated assumptions about time and related issues. Because the future, by definition, does not exist, arguments that depend on its existence would seem to be invalid.

²⁰ Hume, *Enquiry* (1772: 182), q.v. for the context of this and the preceding quotation: “The existence, therefore, of any being can only be proved by arguments from its cause or its effect; and these arguments are founded entirely on experience. If we reason *a priori*, any thing may appear able to produce any thing. The falling of a pebble may, for ought we know, extinguish the sun; or the wish of a man controul the planets in their orbits. It is only experience, which teaches us the nature and bounds of cause and effect, and enables us to infer the existence of one object from that of another.”

²¹ Hume says, “No negation of a fact can involve a contradiction. The non-existence of any being, without exception, is as clear and distinct an idea as its existence. The proposition which affirms it not to be, however false, is no less conceivable and intelligible, than that which affirms it to be” (1772: 182). This is the Law of Non-Contradiction. It is interesting to compare Hume’s version to Searle’s (1995: 208ff.), where the issue is approached from a quite different direction.

²² It is surprising because Hume is widely considered to have been a firm atheist.

relevance for Hume's philosophy in the *Treatise*, plainly conveys a (strong) sceptical message."²³ But Hume has not neglected the topic at all. From the viewpoint of the converse, which he expressly suggests we should consider, Hume's "sceptical message", his *overt* argument, is the rejection of a *covert* argument about God.²⁴ Accordingly, the overt Problem of Induction could well be a red herring that Hume has laid in our path to throw everyone off his covert Problem—very successfully, as it turns out.

What it seems Hume might really have wanted to argue about may be called the "Problem of Perfection". If we had perfection in the world, we would have a perfect being, who knows everything, and a perfect, eternal, and unchanging world in which all events, if there were any, would be perfect too. We would have God with his perfect attributes, including his perfect knowledge of everything, and God's world, where everything is perfect, completely regular, eternal, and therefore ultimately the same. But do we have a perfect world like that? No. We have a very imperfect world, full of imperfect beings with very imperfect knowledge, and things and events that are far from perfect too. As Hume points out in his overt argument, because of our general imperfection we cannot acquire data perfectly with our senses, we cannot understand or analyze what we have acquired perfectly, and so on. Therefore, Hume declares, we cannot trust our senses, our inductions, and even our deductions, to tell us the absolute truth about anything. As a result we cannot trust the results of science, and our knowledge in general is unreliable. He says this Pyrrhonian "sceptical conclusion" is unavoidable at the philosophical level.

That would seem to be it, then. But Hume, following the ancient critics of Pyrrho, goes on to tell us that, practically speaking, we cannot live our lives according to Pyrrhonism, so we should not try to apply it to actual daily life; we should just follow convention and habit.²⁵ He

²³ Russell (2012). Note that he cites the *Treatise* here.

²⁴ Cf. Russell (2008) and the comments of McNabb (2009). It seems to be generally unrecognized that there might be serious covert arguments (whether intended or not) in the works of Hume.

²⁵ This last part, Hume's "sceptical solution", is in origin simply the Late Pyrrhonist recommendation for how a Pyrrhonian should deal with daily life, but it goes back directly to Pyrrho, the founder of Pyrrhonism, as discussed in Chapter One and Appendix A.

even blandly notes that everyday life seems to disprove Pyrrhonism anyway. However, this appears to be more of Hume's cleverness.²⁶ Perhaps if we think about it a little more we can see through all the smoke and mirrors, and avoid the traps he has laid for anyone hunting for the solution.

Like Buddha and Pyrrho, then, Hume tells us that the world is irregular, unpredictable, and imperfect, our knowledge is imperfect, we are imperfect. Compare that to the converse:

Imperfect being(s) ► imperfect knowledge : imperfect world ► variation

Perfect being(s) ► perfect knowledge : perfect world ► no variation

Which one do we have? Think of our chosen Modern form of government, think of our economy, think of science, think of anything.

Induction is our imperfect human way of acquiring and analyzing imperfect knowledge about our imperfect world. It might not seem to do well in comparison with God's perfect knowledge, but our world is not perfect, and not being gods, we cannot aspire to have perfect knowledge. That is not all. Imperfect induction is actually *better* for us than perfect induction.

Our imperfect world and everything in it, including ourselves, can *only* be imperfect, so everything must be full of differences. That means everything is full of variation and gradable qualities. In order to deal with our world, therefore, we need an epistemological tool full of variation and gradable qualities, and that is what we actually have: induction. Because of induction, even philosophers can go on with their everyday lives successfully—though of course, far from perfectly, as Searle demonstrates:

²⁶ Hume's description of the way of life a Pyrrhonian should follow may be basically correct, but its philosophical motivation or justification appears to have been either misunderstood or deliberately misrepresented by him. The problem might go back to Sextus Empiricus, who is overly defensive on this point, perhaps in reaction to the fact that the Pyrrhonists were severely criticized in Antiquity because philosophers were supposed to *live* their philosophy, and it was argued that Pyrrhonists could not. The existence of the covert argument seems therefore not to have been realized by the Late Pyrrhonists, or at least not by Sextus. It does not appear that Pyrrho himself had a problem with it, if he recognized the issue at all; he seems to have been uninterested in such philosophical niceties. It would seem that the Buddha did understand the issue, at least intuitively, and did not see a problem with it.

First there is the assumption that unless a distinction can be made rigorous and precise it is not really a distinction at all. Many literary theorists fail to see, for example, that it is not an objection to a theory of fiction that it does not sharply divide fiction from nonfiction. . . . On the contrary, it is a condition of the adequacy of a precise theory of an indeterminate phenomenon that it should precisely characterize that phenomenon as indeterminate, and a distinction is no less a distinction for allowing for a family of related, marginal, diverging cases. . . . Second, and equally positivistic, is the insistence that concepts that apply to language and literature, if they are to be truly valid, must admit of some mechanical procedure of verification. Thus, for example, if one attempts to characterize the role of intention in language, many literary critics immediately demand some mechanical criterion for ascertaining the presence and content of intentions. But, of course, there are no such criteria. How do we tell what a person's intentions are? The answer is, in all sorts of ways, and we may even get it wrong in the apparently most favorable cases. But such facts as these . . . in no way undermine the concepts of intention, fiction, and metaphor. Our use of these concepts and our distinctions between the intentional and the unintentional, the literal and the metaphorical, and between fictional and nonfictional discourse [are] grounded in a complex network of linguistic and social practices. In general these practices neither require nor admit of rigorous internal boundary lines and simple mechanical methods of ascertaining the presence or absence of a phenomenon.²⁷

To put it another way, *none* of our everyday thinking actually involves any genuine absolutes—whether perfect knowledge, perfect actions, perfect beings, or whatever. As Pyrrho says, all “matters, affairs, events” are inherently undifferentiated—therefore we do our best to provide them with differentiae—and because everything is also unstable and unfixed, we have to adjust our own stance on the ship of thought and change our judgements to accord with the shifting seas. We think by categorizing, and we have done it successfully enough to have survived for several million years as hominids. The things we attempt to categorize, our categories themselves, our process of categorization, ourselves as categorizers,²⁸ are all imperfect approximations;

²⁷ Searle (1983).

²⁸ On sublinguistic categories in language, see Beckwith (2007b).

they are not “absolutely” True or False, and they are not precise in any way. But as a consequence, there are by definition *differences* in precision, including differences of *quality* of the differences, such that some data (or samplings of things) can be more consistent than other data, and the judgements that some people make can be more consistent and conform more closely to the data than those made by others, and the totality of judgements about something made so far by one group of people can have more consistency than the totality of judgements made by another group, and so on. That means we have *gradability*.

In short, Pyrrho disproves the absolutist-perfectionist approach of Aristotle and others, but he leaves *practical* science possible, as Pyrrho’s student Timon and the later Pyrrhonist physicians—including Sextus Empiricus—showed. Nevertheless, it is strictly *a science of phenomena perceived by our senses*; we cannot expect absolutes, and should not look for them.

The logically valid converse of Hume’s *overt* “Problem of Induction” is thus Hume’s *covert* “Problem of Perfection”, which is inapplicable to us and our world because—as Hume points out so well in his overt argument, the “Problem of Induction”—we and our world are not perfect, among other things. All of this “imperfection” is simply the way that our world is, but *because* of its variety, gradability, changeability, and so on we have developed gradably imperfect minds, and imperfect, constantly changing languages, which allow us to deal with the gradable imperfection of everything in our gradable, imperfect world.

For example, it is possible for us to decide whether it is better to eat at Maximilian’s Grand Gourmet Restaurant or Louie’s Little Country Cafe. This is not exact, perfect knowledge. A lot depends on each of us as different, gradable individuals, too. The fact that old Louie has stayed in business for fifty years and is still going strong tells us that a lot of people like his cooking. Although Maximilian’s has been in business even longer and serves a ritzier clientele, Louie’s customers feel at home eating at his place, and they would not like the fancy food at Maximilian’s, while the reverse is equally true. Some people think that Leonardo da Vinci was the “greatest” painter in Western art history, while others think that Rembrandt, or someone else, was “even greater”. Even the same individual often makes different judgements at different times, depending on many variable factors. For example,

right now a keyboardist might like to play the *Sarabande* from Bach's French Suite No. 5 on the harpsichord, but at another time she might like to play a Chopin *Nocturne* on the piano, or another piece of music composed back when there was living Art. The fact that we can make such judgements at all tells us not only that our minds are part of this imperfect, variable, gradable world, it tells us that they have developed precisely to deal with it. Could a perfect mind, attuned to its perfect self and its perfect world, even be able to comprehend our imperfect world, with significant differences between individual paintings or compositions? Structural harmony in Western music is based upon what are called "perfect" and "imperfect" intervals. Even though none of them are really "perfect" in an absolute sense, the greatness of a composition lies partly in the composer's ability to use the *imperfect* intervals to heighten appreciation of the perfect ones, and vice versa. But in a *perfect* world, as far as we can conceive of one at all, there could only be a *single* painting, a perfect one, which would probably all be a single perfect color, and there could only be a *single* piece of music, a perfect one, no doubt consisting of a single note. We would probably not be able to recognize either one as art or music. A being with perfect knowledge would actually be unable to comprehend our imperfect world, just as we would not be able to comprehend its perfect one. There is no room for perfect, Divine knowledge in our world. It would be useless. If Hume did not have imperfect (and thus gradable) knowledge of our imperfect (and thus gradable) world, it would have been impossible for him to have written a single word.

If it be no longer simply *assumed* that perfection exists, either as God and God's world or our own world (either in our perceptual reality or in the mind of God), or that scientists or other humans could have "perfect" or "certain" knowledge of anything, then the only kind of knowledge that can exist must by definition *not* be perfect or certain. Could this "imperfect" or "uncertain" human scientific knowledge be a problem? In fact, without the prior assumption of the existence of "perfect" knowledge, it is difficult or impossible to conceive of there being any fundamental problem with human scientific knowledge, though it is, to be sure, intrinsically "imperfect".

Human knowledge is by definition different from God's knowledge, or "supernatural" knowledge, which by definition is "perfect", and

therefore not gradable into different degrees of “perfection” (or vice versa). Accordingly, human or “natural” knowledge is by definition not “perfect”: it is *necessarily* gradable and therefore “imperfect”. If it be assumed to begin with that human knowledge is by definition imperfect, the logical conclusion can only be that all “natural” knowledge can *only* be imperfect, including all knowledge about the world obtained by human scientists.

This circular argument corresponds to a less obviously circular argument: the one based on the assumption that the world is perfect and perfect knowledge of it exists in the mind of God, and therefore human knowledge, being imperfect by comparison, is worthless. The meaninglessness of such arguments ought to be apparent. Leaving aside God, if no knowledge in *our* world is or can possibly be “perfect”, there could not be anything intrinsically wrong with knowledge that is not “perfect”, because it is the only kind that actually exists in our world, and in any intrinsically imperfect world it is the only kind that *could* exist. As far as we are concerned, it is just knowledge, plain and simple—it is the way that it is—and, being natural, it is gradable, so some parts or aspects of it are naturally more accurate than others. In scientific work it is necessary to work toward the highest degree of precision possible, and it is the gradability of our knowledge which gives us the ability to do that.

Science, the attempt of humans to study the world we perceive, is explicitly based on *precise* thinking. It thus requires the careful use of logic, careful observation, careful experimentation, and so on. This emphasis on *precision* represents recognition of the fact that most thinking—and most language—is in actuality far from precise, the most carefully constructed logical argument can be faulty, our abilities to observe, test, record, and analyze are limited, flawed, and imprecise, and so forth. Therefore, professional working scientists actually do recognize that our knowledge is unavoidably imperfect. That is why science *as actually practiced* is overwhelmingly concerned with precision, protocols, replicability, and so forth. Science is method.²⁹ The point of science, then, is not to achieve the fantasy of perfect knowledge, or absolute truth, about anything. It is simply to understand the world *to the best of our abilities*. That is what is meant when it is said that “the goal

²⁹ On the origins of the medieval scientific method (the recursive argument method), which was born not in Europe but in distant Central Asia, see Beckwith (2012c).

of science is the truth.” If it were not a *goal*, we would already have attained what we seek, and it would therefore be perfect, absolute Truth, we would be supernatural beings, we would already know everything, and we would not need science. Any knowledge attainable by humans is by definition imperfect, so if humans attain imperfect knowledge of anything, it must be the truth *as far as we know it*. Because absolute, perfect, true, Divine knowledge about anything must be totally perfect as a whole, it cannot contain any degree of imperfection and therefore it could not represent the world as we perceive it, which is full of imperfection, while if Divine knowledge *corresponded* to an imperfect world it could not be perfect knowledge either, and thus not Divine. Even if God suddenly decided to give us access to perfect, divine knowledge, and also conferred on us the divine ability to understand it, it would nevertheless be useless to us for understanding and dealing with our graded, “imperfect” world.³⁰

The Problem of Induction is thus on the whole not really a problem at all, but simply a statement of the reality of our epistemological faculties. The one real problem is its unmentioned *background*,³¹ which is not the real world, but rather the traditional belief in absolutist-perfectionist assumptions about categorization. For at least the last couple of millennia this belief has formed an unspoken frame of reference for nearly all consideration of epistemological questions, and perhaps for epistemology itself. Instead of analyzing the problems of the absolutist-perfectionist approach and its incompatibility with the known world, philosophers have been obsessed with the many supposed obstacles which, they claim, prevent anyone from accepting the ideas of Pyrrho, Sextus, and Hume as “practical” philosophy. In fact, Hume’s reformulation of Pyrrhonism stands in stark, shocking contrast not to reality, but to the wholly imaginary absolutist background, a construct built on fantasies about perfect this and absolute that. What is perceived to be “problematic” about Hume’s formulation is its frank assessment of the “real-world” situation of humans, human cognitive abilities, and human experience of the phenomenal world. It is not a perfect assessment—some

³⁰ This entire issue has long been understood intuitively by religious mystics, who essentially assert the same thing. For them, the problem can be overcome only through identification by the worshipper with God in the *unio mystica*.

³¹ I use this term in its literal, common-parlance sense here, not the “real-world” sense of Searle (1995).

of its imperfections³² are pointed out here—but in the main it conforms to the data, namely our knowledge about the phenomenal world, our epistemological abilities, and so on. In itself it is really unremarkable except insofar as anyone should have felt it necessary to state right up front what the real world is actually like—to tell people facts of life that they were, and generally still are, unwilling to accept. What makes Hume’s Pyrrhonian view seem problematic is simply that most people have been unaware of their absolutist fantasy—or perhaps unwilling to give it up—right down to the present day.³³

We should now reexamine the source of Hume’s argument. Bearing in mind what we have found out about his variant of the logical argument of Pyrrho, ultimately going back to the Buddha—that is, nothing by nature has its own inherent self-identity—what can we learn about the assumptions and unstated beliefs in the *Trilakṣaṇa* or ‘three characteristics’? Its converse might be, “The one perfect being or world *does* have an inherent self-identity; it *is* perfectly stable; and it *is* fixed.” Exactly as with Hume, the *Trilakṣaṇa* negates the characteristics of God (as well as God’s world, Heaven), presumably the Early Zoroastrian and Early Brahmanist God: an uncaused, perfect, eternal being, in—or the same as—a perfect world.³⁴ The “background” of

³² The most important flaws (which are due directly to the absolutist-perfectionist background) are Hume’s argument about the future, the dogmatic “Academic Sceptic” conclusion in his *Enquiry* to the effect that we cannot really know anything, and his apologetic presentation of his “sceptical solution” (or the idea that there was a problem in his argument that needed explaining by such a “solution”). All of this suggests that Hume was not as consciously aware of the converse of the Pyrrhonist argument (which he has adopted ultimately from Pyrrho, via Sextus Empiricus, via Bayle) as I have imagined, or that he was much sneakier. I must admit that the second possibility is the more appealing, and might well be confirmed by careful research: Hume is said to have remarked late in life that he was not confident enough to assert that atheism is correct, suggesting that he was at heart a true Pyrrhonian.

³³ It is true that many people have had great difficulty in understanding what it is that the Buddha, Pyrrho, and Hume have taught us. That is certainly their problem. But there is no “problem” with induction.

³⁴ Megasthenes summarizes the Brahmanists’ view that “the universe was created and is destructible”. He also says “that the god who made it and regulates it pervades the whole of it” (Strabo xv, 1, 59, Jones 1930: 7:103; Radt 2005: 208–209). Radt (2009: 196) says that the latter is “eine stoische Vorstellung”, citing his trusty old (but unreliable) source Stein (1931: 262, 9ff.), though he also notes that this might be an insertion in the text. Yet it does agree with the view of attested later Brahmanism, or early

the Pyrrhonist position, and of Buddhism before it, is therefore also absolutism-perfectionism, just as with Hume's position.

However, if we *start* from God and his Godlike world, absolutely perfect and blissful in every respect, and then turn to the *exact* converse, we do not actually get back to us and our world. Instead, we get the *exact opposite* of a Godlike world, with *absolute* imperfection, *total* irregularity, and *complete* unpredictability from one instant to the next. As it is a world where only absolute imperfection exists—and just as in a perfect world, there is no possibility of gradation—so cognition (at least as we know it) is actually impossible. This is not only not our world, it is not even a possible world: it is an absolute chaos, an impossibility.³⁵ And its exact, perfect opposite, a perfect eternal world, must be impossible too. We are left with only one possibility: the *imperfect* converse of these “absolute” worlds, namely our own *non-absolute imperfect* world and *imperfect* knowledge.

This brings up the question of *why* the Buddha expressed his insight in the *Trīlakṣaṇa*. Was he, too, expressing a veiled criticism of the dominant belief system known to him—Early Zoroastrianism or Brahmanism, or perhaps both—which like Christianity focused on an all-creating divinity and the perfection of things? Or, since the Buddha would seem really to have been by origin a Scythian (Saka), was it perhaps a Central Eurasian belief system, with its monotheistic, all-powerful Heavenly God and the belief that nobles went to Heaven after death? To the Buddha, either choice—the traditional perfectionist paradise (corresponding to the pursuit of pleasure) or its exact opposite, a hellish chaos (corresponding to extreme asceticism)—must have seemed untenable. The Buddha, Pyrrho, and Hume give the same solution for the problem they only partly present: a Middle Path between the extremes. That fits

Hinduism, and it is part of a quite consistent account of the Brahmanists' metaphysics. Why should this one bit be a Stoic or any other kind of insertion? The traditional Central Eurasian peoples' concept of God and the universe was quite similar to this, and the Greeks, the Indic peoples, and the Persians, being Indo-Europeans, all came from Central Eurasia (Beckwith 2009: 29–57). This sort of view is an example of the ad hoc smorgasbord approach to the history of philosophy and religion, q.v. Appendix B.

³⁵ The overly narrow, overly conceptualized ideas *labeled* “chaos” and discussed by mathematicians, logicians, etc. are actually highly regularized and not cases of chaos at all, but something else. I mean here simple common-parlance *chaos*, the variety defined in encyclopedias of philosophy as ‘disorder’, and then largely ignored.

well with us and our world, because we are neither *absolutely* perfect nor *absolutely* imperfect; we are somewhere in the middle.

Thus things are varied, though not absolutely, and events are not certainly predictable, though they follow more or less regular natural laws, which fit the nature of our somewhat regular world. People are as varied in their abilities and other characteristics as everything else. Accordingly, our minds too are not absolutely perfect or absolutely imperfect, they are also in between. Because of all the variation, things are gradable, so it is possible for us to think, and to analyze things—not perfectly, but on a gradable scale between “rather bad” and “rather good”, depending on factors such as who is doing the thinking, what they are thinking about, under what conditions, with what data, how “good” and “bad” are usually defined for the matters in question, and so on. This Middle Path is exactly the one we see presented to us in the Buddha’s *Trilakṣaṇa*, in Pyrrho’s version of it, and in Hume’s arguments for, basically, the same thing.

Pyrrho’s teachings—which are manifestly based on Early Buddhism—say that because our limited, imperfect sense perceptions and knowledge cannot give us *perfect truth* or its *absolute opposite* about anything, we should not expect them to do it.³⁶ Instead, we should abandon belief in dogmatic views, resolutely follow the Middle Path,³⁷ and avoid the suffering that results from going to the extremes advocated by philosophers and religious teachers. With a fair amount of practice, we will eventually find ourselves free of the suffering of the passions—undoubtedly not *perfectly* free, but free enough. Pyrrho says we should be “unwavering”, that is, steadfast, meaning we will still have to work at it. We will then experience that which follows passionlessness “like its shadow”: calm, nirvana. This is also Buddha’s teaching, as well as Hume’s “sceptical solution”, which now makes perfect sense.

³⁶ “Therefore (due to the problem [the *Trilakṣaṇa*] that he has just noted), neither our sense perceptions nor our views or theories (*doxai*) tell us the (ultimate) truth or lie to us (about *pragmata* ‘things’). So we certainly should not rely on them (to do that).” See Chapter One; for detailed analysis of the Greek text see Appendix A.

³⁷ The middle way that the world itself suggests to us, the middle path between the extremes, which eventually leads to passionlessness.

NON-RECTILINEAR LOGIC

Pyrrho shows that traditional logic, which may be called “rectilinear logic”,³⁸ depends on a perfectionist-absolutist and logical impossibility: the idea that things do have their own naturally innate self-identities. Therefore, from the traditional point of view, all such supposedly valid arguments are in fact circular and invalid, and the beliefs of their proponents are unsupported. Moreover, because there are no valid rectilinear arguments, there are no valid “perfect” absolutes, and vice versa.

This however suggests that the converse should be fine: what we may call “non-rectilinear logic” should be valid if it is *not* rectilinear. Is this possible, or even conceivable? Certainly Pyrrho seems to have considered his logic to have been impeccable. So did Timon and the Late Pyrrhonists. In that case, having demonstrated the fundamental invalidity of all other “philosophy”, which was based on rectilinear logic, was Pyrrho’s own argument merely a “purgative”, as the Late Pyrrhonists say, which expels itself along with the bad stuff? That would be necessary, perhaps, if we accepted the absolutist view of everything; if not, we must consider what it might mean.

First we must accept that Hume’s analysis of induction is largely correct, and humans’ *innate way of thinking* is, in fact, essentially and unavoidably—though *not perfectly*—“circular.” This is because we always necessarily start from preformed notions, terms, and so on, and cannot think without them.³⁹ One might object, “Surely there is a way to argue which is *not* circular and invalid!” But we did *not* say, “Because our thought is ‘circular’ it is *invalid*.” It is “circular” in its

³⁸ The most natural terms to use here would perhaps be “linear logic” (for traditional logic) versus “circular logic”. However, “linear logic” has been adopted by Jean-Yves Girard and others as a term for a new variety of traditional logic; due to its use for computational purposes it has become widely known. The term “circular logic” would be easily confused with “circular argument”, which is not always easy to distinguish from it. Whereas a “circular argument” is invalid within traditional “rectilinear” logic, it would evidently not necessarily be invalid in non-rectilinear (“circular”) logic. These problems require serious study, and it is not certain that they can be easily ironed out. For this reason I have coined the terms “rectilinear logic” and “non-rectilinear logic”. I would like to thank Michael Dunn (p.c., 2014) for his helpful comments, though he is of course not responsible for any errors.

³⁹ This is of course Pyrrho’s point too.

underlying construction in our minds. That is not “bad”. It gives us recursion—self-reflection. Most people think that is “good”. It gives us the potential to do more than the primitive, reactive cognition done by most non-hominid animals, and not a few hominids too.

The Buddha’s logic is “circular” as well.⁴⁰ According to the *Trilakṣaṇa*, things constantly change, and that change can *only* be conditioned change. Why “only”? The necessity follows upon the assumption that for anything to truly, absolutely exist as a discrete thing, it must have a permanent inherent identity, which therefore cannot change, and as a result causation—which involves change—is impossible. The Buddha rejects this absolutist-perfectionist view. And as Hume shows so well, causation is all around us and a fundamental feature of our mental processes, so we can hardly deny that causation seems to exist as much as anything else seems to exist. Moreover, if things do not have their own innate identities, then they cannot be fixed, balanced, and so on either. So they do constantly change, as the Buddha and Pyrrho both say. Things also cannot change by themselves, so they must change in connection with other things. As all things can appear to exist only in relation to other things, they affect each other. This is Buddha’s “conditioned change”, another point at which we can see the “circularity” in his thinking.⁴¹

Next we should consider what any valid logic might be like in a human mind that is inescapably “circular,” or better, non-rectilinear, in its internal workings. A valid non-rectilinear argument must of course identify and define all points in the argument to the degree possible,

⁴⁰ The Buddha and Pyrrho say that the problem is in the mind. We see all of this, or our teachers tell us about it, and we worry about it and try to avoid it. But it is a mental trap, and we should undo it. In order to do that, we must use the mind, the very thing that is causing the trouble, and we must use the home of the mind, the body, to help too, via what we call in English *meditation* and *yoga*. All this may be normal human logical thought, but it is “circular.”

⁴¹ In traditional Normative Buddhism, the Buddha is thought to have seen the world as a kind of circular trap, *samsara* (Sanskrit *saṃsāra*). It is understood not to have been limited to this life, because of the widespread belief, perhaps based on inductive logic, that just as nature changes in the cycle of the seasons—plant lives, animal lives, etc.—so humans regularly die and are eventually reborn, their particular births having been determined by karma. However, the idea of *samsara* and this idea of rebirth (which is unlike the attested early form of the idea) is not mentioned or reflected in any hard data on attested Early Buddhism. Cf. the Prologue.

but in such a logic, *delimiting* the ends of the argument would make it rectilinear, and thus invalidate it. To be valid human logic, it must refer back to the beginning—it must be recursive somehow. We cannot cut the circle. Is that illogical, or unscientific? Consider a famous example of a model scientific argument. Einstein's Theory of Relativity defines mass and energy in terms of each other. It says, in effect, that mass is "ultimately" indistinguishable from energy.⁴² It is a twice-"circular" argument *and* the theory conforms well to the data, so it is "circular" thrice over. The argument of the Buddha, Pyrrho, and Hume disproves its apparent covert opposite, a rigid *rectilinear* argument based on the fantasy of perfection, which is invalidated by its circularity. The Buddha, Pyrrho, and Hume also argue circularly, but their argument, like Einstein's, is *inherently* "circular" and thus conforms very well to the way we actually do think. It is this that gives it its great power. Its dissolution of rectilinear arguments allows the Buddhist, Pyrrhonist, or Pyrrhonian to be "left with" our native non-rectilinear logic, imperfection, and so on, and thus the realization that absolutism or perfectionism can lead only to unhappiness.

Conforming to the data as well as it is possible for anything to conform to anything else in our imperfect world is not only what "good" science is about, it is what we do to the best of our abilities in everyday life. That is why Hume's "sceptical solution", Pyrrho's pragmatism, and Buddha's Middle Path are actually not "instrumental" *exceptions* to their respective philosophies or religions after all. All three recommend that we accept what our imperfect minds tell us about our imperfect world, and accordingly reject absolutist-perfectionist thought of any kind.

If we reject absolutist-perfectionist thought, what do we do about Science, or Art? It is difficult to define terms such as these, but if we

⁴² If the countless experiments done in nuclear particle physics show anything, they show that there is no such thing as "matter". Einstein's theory necessarily assumes—even if covertly—that there is a "real" difference between "mass" and energy. The "Big Bang" theory is predicated upon the assumption that there must be absolute beginnings and absolute endings, including the assumption that there had to be an event or a being or something *before* the event or being or something. All of this sounds remarkably like Aristotle's *Metaphysics*, with its Prime Mover, or the medieval Neoplatonic, Aristotle-influenced, Judeo-Christian-Islamic philosopher-theologians' version of God; it does *not* sound like science.

want to have those things we must do the best we can to define them anyway. And it is not just a matter of these and a few other disputed terms, such as *Beauty*, *Purity*, *Truth*, and so on: *all* of our words and concepts, our entire language faculty, our minds themselves, are equally undifferentiated, unbalanced or unstable, and unfixed, as Pyrrho and the Buddha said long ago. Why? Because we are not God, we are not perfect, we do not have perfect knowledge, and we do not have a perfect world, in which everything would necessarily be perfectly differentiated (i.e., self-identified), perfectly balanced, and perfectly fixed (i.e., eternal and unchanging). We are imperfect beings, with imperfect minds, in an imperfect world. If we did not have imperfect minds, we would not only be unable to define *Beauty* and other terms, however imperfectly, we would not even be able to conceive of them, because they necessarily exist and are defined strictly in the context of imperfection; there can be no absolute, perfect definition of them.

Critics of the idea of *Beauty* reject definitions of it *because the definitions are not perfect*.⁴³ But their rejection is based on absolutist-perfectionist premises. In fact, *Beauty* is actually easy for us to imagine, being as we are imperfect. It is also important (importance being a graded, imperfect concept), and we need to deal with it. The consequences of *not* dealing with it, or even openly rejecting it, as has been done for most of the past century, ought to be obvious by now, but they still are not.

No perfect ideals are attainable. That is why they are ideals, goals. That is why the great masterpieces of art are so few. Without the gradation made possible by our imperfect world, including our imperfect minds, we would not notice such differences, and it would be impossible for us to appreciate art at all, so there would be no art, not to speak of “great” art,⁴⁴ which *requires* artists to *aim* at “perfection”—and

⁴³ See Chapter Three for a discussion of Beauty in the *Chuangtzu*. Note that Kant considered it to be impossible to judge beauty according to any external criterion (Eichner 1970: 35–36, cited in Speight 2011). This is of course in line with the view of Pyrrho and other ancient writers, q.v. the Prologue.

⁴⁴ See Beckwith (2009: 263–302, 313–318) on Modernism’s destruction of the traditional tension between the Ancient and the Modern, old and new, which operated in the “high art” tradition, and the failure of comparable new traditions to develop.

only imperfect people in an imperfect world can possibly imagine what that could mean.

Although Beauty is certainly not easy to define, we do have a definition of it, or many definitions, as we must have if we want to think about it, talk about it, and most importantly, *do* something about it. Not working seriously to come up with a better definition than the ones we have, which are mostly based on folklore, impairs our ability to deal with it. If we were to follow a human Middle Path in logic, our category “Beauty” would be varied, imperfect, and ever-changing—exactly as the Buddha and Pyrrho say everything is “by nature”. That would mean we would have a “fuzzy category”. But, those are the only categories we actually do have, *all* of them, as scholars who work on human categorization have long ago shown.⁴⁵ So we already have a nice fuzzy, furry idea of Beauty. Though most people today deny having such an idea, or *any* idea of Beauty, it should by now be clear that their denial simply confirms their acceptance of it. This is the Vise of Circular Logic (or more precisely, “Non-rectilinear” Logic).

PERFECTION, IMPERFECTION, AND DEFINITIONS

God/God’s world ► Absolute Beauty : Beauty is out of this world

- Humans try to achieve absolute Beauty ► *some* Beauty

Humans/our world ► Imperfect Beauty : *some* Beauty

- Humans try to achieve or approximate *some* Beauty ► *some* Beauty

Non-God ► Absolute *non*-Beauty : Rejection of Beauty

- Humans try to do without Beauty, or do the opposite ► *non*-Beauty = Ugliness

Defining our terms means thinking about them—something not done very much these days, because admittedly thinking *is* hard to do—but it is worth the effort if we want artists, poets, and musicians to do Beauty again.

⁴⁵ See Beckwith (2007b).